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**Education Indicators to Examine
the Policy-Making Process in the Education Sector
of Developing Countries**

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Education Indicators to Examine the Policy-Making Process in the Education Sector of Developing Countries

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Abstract

Given the increasingly growing importance of demonstrative data in the process of educational policy formulation, many countries adopt education indicators in the evaluation of their policies. This paper provides an overview of the utilization of various education indicators for the purpose of understanding the educational situation in developing countries and through the analysis of the EFA Fast-Track Initiative, it discusses how such indicators can be applied in connection with educational development assistance to developing countries. The paper concludes that evaluation based on education indicators in connection with the international assistance to developing countries does not necessarily reflect clearly justifiable criteria.

1. Introduction

Evaluation of past policies constitutes an indispensable part of public policy formulation. That this is also true in the case of educational policies seems quite obvious. In reality, however, evaluation-based policy-making has not been sufficiently practiced in many countries. This is particularly true in developing countries whose public sector capacity is not yet fully developed¹⁾. For these countries, the utilization of policy evaluation results in the process of educational policy-making poses a great challenge.

The policy-making process in the education sector in developing countries can be all the more complex because it is necessary to analyze the education sector itself, in terms of the implementation of educational policies, levels of student achievements and so on, as well as educational development aid provided by developed countries (donor countries) and international agencies. In other words, evaluation must concern both the practical efficacy of educational policies in developing countries and the effectiveness of educational development aid to these countries. Although in either type of evaluation, the importance of internationally comparable education indicators is generally understood, education indicators are not necessarily most effectively utilized in actual evaluation.

In view of the need to ameliorate this situation, this paper discusses education indicators that have been developed in connection with educational policy-making in developing countries, as well as how they have been, and can be or should be, utilized. For these purposes, the EFA Fast-Track Initiative (FTI) is taken up as a case to examine how such indicators can be applied in connection with educational development assistance to developing countries.

2. Educational policies and their evaluation in developing countries

Educational reforms are undertaken essentially to improve the system, administration, content and methodology of the present situation of education in terms of access, equity, quality, relevance, efficiency and cost/finance. (Buchert, 1998; Williams and Cummings, 2005). For many developing countries confronted with serious problems in all of these aspects, it is not an easy task to identify priority issues to be tackled, translate them into policies and then into actions that can be practiced in the actual educational settings.

In translating the objectives of educational reforms into national educational policies, many developing countries generally set policy goals from three different standpoints (or interests) each emphasizing (1) human rights, (2) economic growth or (3) social integration, respectively². The standpoint that emphasizes human rights can be traced back to such international agreements as the Universal Declaration of Human Rights (1946) and the Convention on the Rights of the Child (1989), which proclaim the ideal of guaranteeing equal access to education to all, regardless of their gender, age, race and ethnicity. Educational reforms from this standpoint often give priority to increasing school enrollment and diminishing gender disparity. The economic growth-oriented standpoint is founded on the idea that training quality human resources is vital for national or social economic development. From this standpoint, the effectiveness of education as investment is of primary importance, and evaluation mainly concerns the internal and external efficiencies of the education sector. From this standpoint, education (particularly school education) is assessed in terms of productivity, based on input-output analysis. Educational reforms from the standpoint of social integration aim at nurturing a national identity and citizenship among the nation's people through education. In developing countries that are often multicultural, multiethnic and/or multilingual, social integration is expected to be achieved as a result of the diffusion of education. From this standpoint, access to and equity in the opportunity for education and the relevance of educational content are inevitable foci of attention.

These three standpoints notwithstanding, many developing countries experiencing great difficulty with economic progress have an undeniable tendency to emphasize the training of human resources for future economic growth, thus investing more in post-basic education (including vocational training in secondary and post-secondary education) than basic education (Carnoy and

Samoff, 1990)³. Furthermore, even with an optimal allocation of resources realized in public policy-making and implementation including educational policies, the tradeoff between efficiency and equity tends to generate inconsistencies and conflict in the definition of scope of priority investment in the education sector, a major cause of confrontation between stakeholders with respect to educational policies (Stiglitz 1998). As well, while it is essentially important to pay attention to human rights and social integration in countries and regions troubled with ethnic or religious disputes, it should not be forgotten that poverty and other economic problems often underlie such disputes. Therefore, taking into consideration the way various factors are intricately intertwined in reality, objectives of educational reforms and actual policies in developing countries cannot be adequately analyzed without a multifaceted standpoint and reasoning framework (Riddell, 1999a).

Likewise, educational policy-making cannot be pursued from only one of the three standpoints cited above. Rather, they should be adopted in combination in a ratio that is optimal to the political, economic, social and cultural contexts of each country concerned. The concept of Education for All (EFA) adopted in the World Conference on Education for All, held in Jomtien, Thailand in 1990, encompasses those differing interests, while confirming the importance of diffusion of basic education in developing countries as a major challenge for the entire international community⁴. On this premise, it is necessary to strike a balance between basic and post-basic education as areas of investment in the pursuit of educational reforms in developing countries. At the same time, the importance of micro-level (school or community-based) educational reforms is being recognized as concepts such as school effectiveness and school improvement are gradually taking root and attracting growing interest in developing countries. Meanwhile, administrative and financial authority in education is increasingly actively delegated from national to local government in many developing countries as they undergo decentralization under the influence of ideological trends of neo-liberalism (Hirosato and Kitamura, forthcoming).

Under such circumstances, then, how should educational policies be formulated, so that they can comprehensively cover various interests from macro- to micro-levels as they are expected? It is generally accepted that the educational policy-making process is comprised of three main tasks: analysis of importance and objectives, data analysis and estimation, and prediction. In each of them, the clarification of importance of policies and objectives they represent and the analysis of past and present data and situations are indispensable (Davis, 1990; Ross and Mählch, 1990). From such analysis, policy options must be derived from the standpoints of feasibility, affordability and desirability, and then compared and analyzed before final policies are formulated (Haddad and Demsky, 1995). Implemented policies must be then monitored and evaluated to provide feedback for subsequent policy-making cycles. Monitoring and evaluation results should be basically utilized to link the upstream and the downstream of educational administration and design comprehensive and

realistic educational policies in the future. Many criticize, however, that these results are not always appropriately utilized as input into educational policy formulation (Riddell, 1999b).

Evaluation of the education sector involves various stakeholders. As mentioned above, in developing countries, it concerns the practical efficacy of educational policies in developing countries and the effectiveness of the educational development aid that the international donor community provides to them. Such evaluation is conducted by various stakeholders involved in educational policy-making at several different levels, including students and parents as direct beneficiaries of education at the most micro level; teachers and school supervisors (school directors) at the school level; educational administrators at the local governmental (district/municipal), the prefectural/provincial level, and the national level often represented by the Ministry of Education at the most macro level; and officers in charge of educational programs in international agencies and aid agencies of donor countries⁵).

Since these stakeholders represent different positions and interests with respect to educational reforms, they inevitably have differing criteria for evaluating the education sector, although they share the common objective of improving the educational situation in the country. Realistically speaking, it is extremely difficult to realize evaluation in a manner that can satisfy all of these stakeholders' criteria. Instead, an approach that can cover their greatest common denominator should be sought out. To do this, it is indispensable to utilize education indicators based on a range of statistical data considered to be fundamentally objective. In view of this, the subsequent sections focus on education indicators that have been developed to analyze the educational situation in developing countries, and how they have been utilized.

3. Development of education indicators by international agencies

In evaluating the education sector of a given country, optimally objective evaluation criteria can be established by placing the country's educational situation in relative terms through comparison with that of other countries. Marc-Antoine Julien de Paris of France, the founding father of Comparative Education, was the first to propose that surveys be undertaken based on a comparative analysis table, according to which information on education in several countries (in terms of system, objectives, methodology, content, etc.) is systematically collected, so as to effectuate comparative compilation and analysis of their educational situations. Julien also proposed that a special educational committee be established so that respective countries would be able to conduct educational reforms based on such research results. With this proposal, he was indeed predicting the present-day situation: collection, compilation and analysis of information on education around the world led by international agencies. Particularly, education indicators, the nucleus of Julien's concept of the comparative analysis table, have developed into an indispensable tool for international comparison

of educational situations as practiced today. This section provides an overview of a range of indicators that have been developed mainly by international agencies thus far for international comparison of education.

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the Organization for Economic Cooperation and Development (OECD) are the most notable international bodies that collect and analyze international statistics concerning education. They often work in collaboration through their respective specialized institutions or divisions. UNESCO, in cooperation with the ministries of education of countries around the world, gathers statistical data concerning literacy levels, school enrollments at different levels, numbers of graduates and teachers, the percentage of educational expenditure in GDP, etc.⁶⁾. In response to growing demand for highly reliable and up-to-date statistical data required for policy analysis by national governments and international organizations, UNESCO established the UNESCO Institute for Statistics (UIS) in November 1999⁷⁾. This development symbolizes the widespread recognition of the importance of data-based (and evidence-based) policy formulation in many public sectors including the education sector (UNESCO, 2002). OECD also collects statistical data reflecting the educational situations of its member states (as well as data on non-member countries, depending on subjects). Data collected concern the distribution of educational levels, educational expenditure, opportunities for education, numbers of students, standard school hours, post-graduation situations such as enrollment in advanced studies and employment, Program for International Student Assessment (PISA) results, teachers' salaries and working hours, etc.⁸⁾.

The UIS and OECD have jointly developed the World Educational Indicator (WEI) to be used in public policy formulation, with the participation of experts from 19 middle-income countries around the world⁹⁾. The WEI enables international comparison of educational situations in different countries. Since its development program commenced in 1997, large numbers of surveys have been conducted in the participating countries concerning the allocation of financial resources to organizations charged with primary education and at different levels of educational policy making and various other themes¹⁰⁾.

One survey conducted in 2002 (UNESCO-UIS/OECD, 2003) elucidated the effectiveness of education as economic investment, confirming that the diffusion of education contributed to economic growth not only at the national level but also the individual level. It demonstrated the general tendency that the level of education was proportional to the rate of employment and job security and that higher qualifications resulted in higher income. More specifically, in Indonesia, the income of men who finished higher education was 82% higher than that of men who finished secondary education, while in Paraguay the difference between the equivalent two groups was as great as 300%. Based on such results, the survey concluded that effective investment of fairly

distributed resources in human resources can expand knowledge, an important economic asset, leading to the country's economic growth. A 2007 survey (UNESCO-UIS, 2007) showed that the average number of years of school enrollment of children in the countries participating in the WEI development was about 14 years, almost 4 years shorter than that of the OECD countries, indicating the persistent insufficiency of opportunities to enroll in upper-secondary education and higher education in those middle-income countries.

Through annual international comparison of education indicators, these survey results allow clarification of policy challenges of respective countries studied, with indicators as measures of improvement in the educational situation. Since primary education is basically widespread in the countries participating in the WEI development, the survey results usually point to the need for greater access to secondary and higher education and qualitative improvement in education at all levels as important challenges.

Following the international agreement on EFA goals, EFA 2000 Assessment was conducted in the late 1990s in order to review the status of basic education in countries around the world. On this occasion, 18 EFA Indicators were adopted¹¹⁾. These Indicators were positioned as indicators for monitoring and evaluating the status of diffusion of basic education in respective countries, as well as for international comparison of actions taken by different countries to promote EFA. Of the 18 EFA Indicators, 13 overlap those used for above-mentioned educational statistical data annually collected by UNESCO. This indicates that a range of education indicators including the WEI and those developed by UNESCO and OECD are in active use for the monitoring and evaluation of EFA progress.

In the *EFA Global Monitoring Report* published by UNESCO since 2002, the EFA Development Index (EDI) is adopted for measuring the degree of EFA achievement in respective countries. The EFA-EDI is obtained by measuring a given country's degree of achievement in the four areas of the EFA goals (universal primary education, adult literacy, quality of education, and gender equity) in percentages, converting them into indices between 0 and 1 and calculating their average. The closer the country's average index is to 1, the higher its degree of EFA achievement is rated¹²⁾. Countries studied are listed in the order of proximity of their EFA-EDI to 1, thereby clearly indicating their order of superiority in terms of achieving the EFA goals. This ranking is inspired by that of the Human Development Index (HDI), developed for the *Human Development Report* published annually by the United Nations Development Programme (UNDP). In the most recent *EFA Global Monitoring Report 2008* (UNESCO 2007), 129 countries including developed countries were ranked and classified into high-EDI countries (51 countries with EDI at 0.950 or higher), medium-EDI countries (53 countries with EDI at 0.800 or higher and below 0.950) and low-EDI countries (25 countries with EDI below 0.800). Little significance can be found in comparing

Norway, which was ranked first (0.950), with Chad, which was ranked 129th (0.409), because of the enormous gaps in the economic and social situations between the two countries. Meanwhile, the fact that countries classified into the low-EDI group (17 in sub-Saharan Africa, 4 in South Asia, 3 in Arabic States, and 1 in Southeast Asia) are mostly situated in sub-Saharan Africa followed by South Asian countries, where large percentages of the population are economically and socially disadvantaged, clearly reflects the current status of diffusion of basic education in the international community. At the same time, it should be noted that both EFA Indicators and EFA-EDI are based on national-level data and not micro-level data which can reflect regional differences within a country. Therefore, it is necessary to develop indicators for international comparison that reflect micro-level data as well. To this end, items in school surveys already conducted in countries around the world should be redesigned so as to be linked with the EFA Indicators and EFA-EDI.

Those education indicators mainly developed by international agencies can be utilized in educational reforms in developing countries from the three standpoints mentioned above (each emphasizing human rights, economic growth, and social integration). For educational reforms from the human rights-oriented standpoint, which emphasizes equity and justice through the diffusion of education, indicators relating to enrollment and gender disparity are particularly important. The economic growth-oriented standpoint attaches importance to indicators relating to the completion and content of education since the quantity and quality of labor force for future labor market are major concerns in educational reforms. From the standpoint of social integration, indicators relating to the guarantee of access to opportunities for education to all the people constitute the foundation of educational reforms, while equity and the relevance of curriculum should also be closely examined.

Table 1 shows these indicators classified by different areas of objectives of educational reforms. Those listed in this table are generally-utilized indicators, and do not represent all the indicators that should be utilized in the actual evaluation of educational reforms of a given country, which require multifaceted examination from various angles.

Countries have been collecting and analyzing educational statistical data by using these education indicators developed by UNESCO and OECD and supplementing them with their own country-based indicators. In developing countries in particular, these education indicators are indispensable for policy evaluation, necessary for conducting educational reforms and applying for aid from the international donor community (developed countries and international agencies) assisting educational reforms. In the subsequent section, the EFA Fast-Track Initiative, which is being actively introduced into low-income countries, is taken up as a case of international assistance to developing countries, to examine how educational reforms in developing countries should be assessed with the use of education indicators.

Table 1. Education indicators classified by areas of educational reforms

Areas of Education Reforms	Education Indicators
Access	admission rate, enrolment rate, attendance rate
Equity	admission rate, enrolment rate, transition and drop-out/repetition rates, test scores of students, school inputs/facilities*
Quality	test scores of students, cost per pupil, teachers qualification, pupil/teacher ratio, pupil/classroom ratio, quality of teaching/learning process*, adequacy of teaching content*
Relevance of Curriculum	employment/unemployment rate, graduate tracer studies (usually for higher or technical education)*, admission of university graduates to graduate studies abroad*, labor market feedback on job opportunities of graduates by field*
Internal Efficiency	promotion rate, repetition rate, drop-out rate, survival rate, completion and graduate rates, pupil/teacher ratio, pupil/classroom ratio
External Efficiency	rate of return to education
Cost / Financing	cost per pupil, cost of educational inputs, education expenditure as % of GDP or government budget, public versus private costs

Note: These indicators may not be quantified and would require more qualitative analysis.

Source: Table prepared by the author with reference to UNESCO Nairobi Cluster (2006)

4. Utilization of education indicators in assistance for developing countries: a case of the EFA Fast-Track Initiative

Even after the World Education Forum held in Dakar, Senegal in 2000, the diffusion of basic education in developing countries did not progress as well as expected. In this situation, developing countries and civil society organizations (NGOs, teachers' unions, foundations, religious organizations, etc) started raising their voices, asking donor countries and international agencies to further improve their aid to developing countries. On the donor side, the World Bank, as a major aid provider, responded by establishing a new framework of financing for basic education in developing

countries, the EFA Fast-Track Initiative (EFA-FTI), whose secretariat was also placed within the World Bank. This international initiative involves providing intensive financial and technical assistance to the education sector of selected low-income countries, so as to enable them to get on the “fast track” toward the goal of universal primary education, considered particularly important among the EFA goals (World Bank 2002a).

In the background of the movement leading to the formation of the EFA-FTI was a series of international conferences held since 2000, in which major developed countries and international agencies have manifested their intention of increasing international development aid¹³⁾. In particular, at the International Conference on Financing for Development held in Monterrey, Mexico in 2002, the United States, the European Union and other major donor countries pledged an increase in their official development assistances on the condition that developing countries commit themselves to appropriate utilization of aid. This did not mean, needless to say, that all developing countries would be automatically entitled to abundant funds. Effective and efficient utilization of limited resources still remained an essential requirement. Accordingly, it was decided within the framework of the EFA-FTI that priority would be given to developing countries that had already demonstrated an active political commitment to the diffusion of basic education and such countries would be selected as recipients of concentrated assistance, so as to ensure tangible positive results¹⁴⁾.

The EFA-FTI, thus adopted for the goal of effective and efficient utilization of development aid funds, is characterized by its Indicative Framework with numerical targets concerning the diffusion of primary education as benchmarks. These benchmarks are indicators calculated on the basis of achievements made by high-performance developing countries in the area of basic education, including the realization of universal primary education (World Bank 2002a). The benchmarks, set up especially for low-income countries that require extensive improvement in the education sector, serve as norms that direct the national governmental educational services and financial reforms in the education sector of developing countries. Therefore, the numerical targets presented in the table are not absolute standards and may be applied flexibly in line with the context of respective countries¹⁵⁾.

As recent years have seen a growing interest in qualitative improvement in educational development and reforms in developing countries, the EFA-FTI clearly reflects interest in students’ learning process and aims at qualitative improvement in student academic achievement and school quality on the foundation of partnerships with various actors including families and community (World Bank 2002b). Within the Indicative Framework, instead of the conventionally employed enrollment rate in primary education, the completion rate is adopted as an indicator of educational quality since it can basically measure the progress of the movement for universal primary education (UPE). The pupil-teacher ratio and the repetition rate are also used as indicators to assess the quality

of education.

Nevertheless, there is much room for improvement with the current Indicative Framework. Those indicators (primary completion rate, repetition rate, etc) currently adopted are not sufficient to measure the quality of education. It is obvious that a more comprehensive study examining the level of student academic achievement and other matters is indispensable. The current Indicative Framework, however, does not require surveys enabling such examination. The Indicative Framework can also be improved by including, among others, the enrollment in lower-secondary education since qualitative improvement in primary education is usually expected to increase enrollments in secondary education.

The Indicative Framework, a set of indicators to be utilized for improvement in the education sector by the government of developing countries, also serves as indicators for educational development assistance by developed countries and international agencies. The importance of monitoring and evaluation of effectiveness and efficiency of educational development assistance has been frequently pointed out since the 1960s, without much progress in the formulation of internationally-agreed evaluation criteria. The education indicators developed by UNESCO and OECD, widely applied to gauge the educational situation in developing countries, have been utilized only in a limited manner to assess educational development assistance. The Indicative Framework, on the other hand, can be utilized as indicators for this purpose since it evaluates the education sector with reference to numerical indicators concerning the financial situation, effectiveness of policies, etc., thereby providing a “common frame of reference for all countries” (World Bank 2002b, p. 11). It can also be used by donors in the decision-making process of educational development assistance since the Indicative Framework, comprised of internationally comparable indicators, can be utilized to determine the degree of political leadership of developing governments in the process of adopting appropriate primary education policies, which can determine the implementation of aid (Prouty 2002).

Now, let us examine how education indicators are utilized in the actual process of implementing educational development assistance through the EFA-FTI, an international initiative designed for the active use of the Indicative Framework and various other education indicators. Such examination should ideally include the verification of national-level changes realized in the actual situation of primary education in FTI recipient countries. However, it is still too early to verify the effectiveness of the initiative itself since only a few years have passed since its full-scale introduction. Therefore, this paper examines how education indicators are actually utilized in the process of selecting FTI recipient countries.

As of June 2008, 35 countries have been approved as FTI recipient countries. These countries can be classified by the EFA Development Index (EDI) mentioned above into 12 low-EDI countries,

9 medium-EDI countries, 4 high-EDI countries (UNESCO 2007), and 10 countries whose EDI calculation was probably impossible due to the lack of well-documented educational statistical data (see Table 2). Data in the reports of country-specific assessment submitted to the EFA-FTI Secretariat suggest that the educational situation in many of these 10 countries can be considered equivalent to that of low- or medium-EDI countries¹⁶.

Table 2. Situations of improving basic education in the FTI recipient countries (Comparison between 2002 and 2005)

Improved since 2002	On track → Achieved	Off track → On track	Seriously off track → On track	Seriously off track → Off track
	Kyrgyzstan (2006) (0.974)	Benin (2007) (0.583) Guinea (2002) (0.579)	Madagascar (2005) (N/A)	Cameroon (2006) (N/A) Ghana (2004) (0.714) Niger (2002) (0.480)
Similar to 2002	Achieved	On track	Off track	Seriously off track
	Albania (2006) (0.953) Guyana (2002) (N/A) Mongolia (2006) (0.929) Tajikistan (2005) (0.970)	Cambodia (2006) (0.807) Moldova (2005) (0.940) Nicaragua (2002) (0.804)	Lesotho (2005) (0.824) Mali (2006) (0.559) Mozambique (2003) (0.631) Rwanda (2006) (0.688) Senegal (2006) (0.651) Yemen (2002) (0.650)	Burkina Faso (2002) (0.531) Djibouti (2006) (N/A) Mauritania (2002) (0.666)
Worse than 2002	Achieved → On track	On track → Off track	On track → Off track	
	Vietnam (2003) (0.899)	Georgia (2007) (0.976)	Ethiopia (2004) (0.616)	
Unknown about the Improvement Levels	Changes in Education Indicators			
Central Africa (2008) (N/A) East Timor (2005) (N/A) Gambia (2003) (N/A) Haiti (2008) (N/A) Honduras (2002) (0.848) Kenya (2005) (0.824) Liberia (2007) (N/A) São Tomé & Príncipe (2007) (0.891) Sierra Leone (2007) (N/A)	Net Enrolment Rate in Primary Education: 49.93% (2004) → 55.52% (2005) N/A (2002) → Primary Completion Rate: 37% (2006) N/A (2002) → Seriously off track (2005) Primary Completion Rate: 68% (2003) → 68% (2006) N/A (2002) → Primary Completion Rate: 79% (2005) N/A (2002) → Achieved (2005) N/A (2002) → N/A (2005) Primary Completion Rate: 42.2% (2003) → 47.2% (2006) N/A (2002) → Primary Completion Rate: 55% (2005)			

Note 1: Definition of Each Category: Achieved: Current primary completion rate is equal to or above 95%. / On track: Current primary completion rate is below 95%, but given the current progress rate, is likely to reach the 95% target by 2015. / Off track: Current primary completion rate is below 95%, and given the current progress rate, is unlikely to reach the 95% target by 2015, but likely to achieve this target by 2040. / Seriously off track: Current primary completion rate is below 95%, and given the current progress rate, is unlikely to reach 95% target by 2040.

Note 2: Two numbers in the parentheses next to the country name indicate the year of being endorsed as the FTI eligible country and the country's EFA Index of 2005 respectively.

Source: Table prepared by the author based on EFA-FTI Secretariat (2007), the EFA-FTI Secretariat website (<http://education-fast-track.org/default.asp> [accessed in May 20, 2008]) and UNESCO (2007).

The EDI of all of the high-EDI FTI recipient countries are indeed very high: 0.976 for Georgia (primary net enrollment rate: 0.931, adult literacy: 0.998, gender-specific EFA index: 0.993, survival rate to grade 5: 0.982; the figures are given in the same order below); 0.974 for Kyrgyzstan (0.946, 0.992, 0.991, 0.969); 0.970 for Tajikistan (0.974, 0.996, 0.930, 0.980); and 0.953 for Albania (0.940, 0.989, 0.982, 0.899). The component indicators used to obtain the overall EDI are also all in the high range of 0.9 and above, except Albania's survival rate which is slightly below 0.9. It is quite probable that these high-EDI countries have many problems in their education sector and therefore require assistance from the international community. Yet, in view of the fundamental principle of the EFA-FTI, it is natural to question the legitimacy of these countries being selected as privileged recipients of limited resources in the international community.

Moreover, in about one-third of the 35 FTI recipient countries, universal primary education (primary completion rate 95% or more) has already been achieved or is well on track¹⁷). It is possible to attribute this improvement to the EFA-FTI in the case of some countries. However, it is obvious that many countries that could be adjudged to be already on track toward the realization of universal primary education before selection have become FTI recipients, since several of them have managed to improve their educational situation before the EFA-FTI funds became available. These countries have probably attained this improvement by, to a certain degree, reallocating domestic funds and utilizing external funds already provided by donors, even without additional EFA-FTI funds.

Needless to say, necessary measures including external assistance must be devised if quality of education itself remains poor, even though universal primary education has been realized. One such example is Kenya, a FTI recipient country. In 2003, Kenya adopted the policy of free primary education and has since maintained its higher gross enrollment rate in primary education at 110% or above (UNESCO, 2007). However, the high enrollment rate has been easily attained by the drastic increase of students, which has led to problems such as classroom and teacher shortages due to insufficient budgetary measures. In some urban areas, there were too many low-grade students to be admitted to classrooms. As a result, overall quality in Kenya's primary education has largely deteriorated. In such situations, significance can be recognized in international initiatives, such as the EFA-FTI, which can provide improved assistance to primary education. Still, the present EFA-FTI cannot escape questions, in view of more serious problems than in Kenya resulting from educational quality deterioration following the adoption of free primary education policy in some other African countries, such as Malawi, Tanzania, Uganda and Zambia, which are not currently FTI recipients¹⁷).

The above overview of the education indicators applied to FTI recipient countries inevitably leads to the supposition that factors other than the education indicators weigh considerably in the selection of FTI recipient countries. Needless to say, the selection of FTI countries should take into consideration political, economic and societal conditions of candidate countries. Yet, the question

remains as to whether priority in assistance should rather be given to countries in most difficult conditions with regard to the goal of diffusion of education. It is difficult to justify development aid to high-EDI countries while 13 of the 25 low-EDI countries have not yet received EFA-FTI assistance. It is obvious that without expanding assistance to those low-EDI countries and other low-income countries in difficult situations, the international community as a whole will encounter extreme difficulty in realizing its EFA goals (or at least universal primary education).

The Indicative Framework of the EFA-FTI and other education indicators are used to assess both the practical efficacy of educational policies in developing countries and the effectiveness of educational development assistance to these countries. It should be noted that simplistic equation of countries implementing educational policies of high practical efficacy as those deserving effective educational development assistance can lead to misplacing the essential significance of development aid. The effectiveness of educational development assistance should be recognized in improvement in practical efficacy of educational policies realized through assistance to countries that used to have educational policies of low practical efficacy. Assistance to countries already armed with educational policies of high practical efficacy cannot necessarily be effective. In this sense, the selection of countries already demonstrating high EDI and other education indicators as FTI recipients can be adjudged as inappropriate at least from the standpoint of aid effectiveness.

The examination of criteria applied to the selection of FTI recipient countries as presented above underlines the necessity and importance of evaluation of actual changes that take place in basic education in countries concerned in the actual development of international aid initiatives.

5. Conclusion

Given the increasingly growing importance of demonstrative data in the process of public policy formulation including educational policies, many countries adopt education indicators in the evaluation of their educational policies. This paper has provided an overview of the utilization of various education indicators for the purpose of understanding the educational situation in developing countries and discussed how such indicators are applied in connection with educational development assistance to these countries. As a result, as the case of the EFA-FTI, evaluation based on education indicators in connection with the international community's assistance to developing countries does not necessarily reflect clearly justifiable criteria.

At the same time, since different concerns and interests related to human rights, economic growth, social integration and so forth exist in the education sector of each developing country in its particular conditions and surroundings, education indicators should not be formed and applied in a uniform manner but should be utilized flexibly in consideration of each country's political, economic, social and cultural situations. In planning educational development assistance to developing

countries, priority should be given to the realization of inclusive and equal education that does not fail to take in the socially vulnerable, as well as to assistance to Fragile States, plagued with governance and institutional problems such as compromised State capacity and governmental functioning due to internal disputes. In some cases, such problems cannot be adequately grasped with the use of education indicators developed mainly by international agencies such as UNESCO and OECD as described in this paper, and the development of new indicators should be given serious consideration in the future. With regard to qualitative improvement in education, in which interest has been growing in many developing countries these days, differences between developed and developing countries point to the obvious inadequacy of application of education indicators used in the former to the latter if introduced without modification. Further examination is required concerning optimal application of education indicators in consideration of actual situations in developing countries.

One major future challenge lies in defining ideal education indicators and their position in understanding the situation of the education sector of respective developing countries as accurately as possible in the evaluation of educational policies from various approaches including the evaluation of EFA-FTI effectiveness. In meeting this challenge, a multifaceted standpoint and reasoning framework should be established, as mentioned in this paper, so as to realize educational policy evaluation that can truly contribute to improving the educational situation in developing countries.

Notes

- 1) Analysis of the education sector's capacity must cover three aspects: systems (legal institution, educational system, administration, etc.), organizations (Ministry of Education, educational authorities at local governmental levels, school, etc.), and individuals (teachers, school principals, educational administrators, etc). In addition, the financial foundation of the education sector and its surrounding societal environment (e.g., acceptance of, and support to, schooling) must also be taken into consideration. Refer to Williams and Cummings (2005) and Hirosato and Kitamura (forthcoming) for descriptions of capacity required in each of these aspects and its development.
- 2) These three standpoints or interests have been classified by the author. In establishing this classification, the author has referred to the method of analysis of educational reforms in developing countries through educational, political and economic "lenses" proposed by Riddell (1999a).
- 3) Psacharopoulos (2006) divides the evolution of the World Bank policies of educational assistance into five stages. The World Bank, established in 1945, provided its first loan in the educational field in 1963. Therefore, it can be said that the Bank had virtually no educational assistance policy in the period between 1945 and 1963. From 1963 to 1987, the World Bank considered the education sector a "soft" sector, situated outside the sphere of its activities, providing assistance only to vocational training (in and after secondary education) in "hard" sectors (those related to industrial and infrastructural development). From 1987 to 1990, following repeated discussions amid some confusion, and treating the World Conference on Education for All that it organized in 1990 as a new start, the World Bank began expanding its assistance in basic education.
- 4) Refer to Kitamura (2007) for a detailed description of the concept of EFA.
- 5) Refer to Ross and Postlethwaite (1988) for detailed analysis of different interests and desires that these stakeholders represent with respect to educational policies and different manners in which they participate in policy-making and implementation.
- 6) Data collected by UNESCO were published each year as *Basic Facts and Figures* between 1952 and 1962 and as *UNESCO Statistical Yearbook* between 1963 and 1999. In addition, UNESCO has published reports, including *World Survey of Education* (published five times between 1955 and 1972), *World Education Report* (published five times every other year between 1991 and 2000) and *EFA Global Monitoring Report* (preliminary issue in 2001, annual publication since 2002), in which statistical data on education are analyzed and international trends of educational issues and the status of implementation of educational policies are discussed. The publication of the *Yearbook* was discontinued in 1999, but the latest statistics on major educational subjects are available on the "Education Statistics" on the UIS web site [http://www.uis.unesco.org/ev.php?URL_ID=5187&URL_DO=DO_TOPIC&URL_SECTION=201] (last viewed by the author on April 20, 2008).
- 7) The UIS was initially established at the UNESCO Headquarters in Paris and was moved to its present

location on the campus of the University of Montreal in Canada in September 2001. In addition to Montreal, UIS statisticians are permanently posted in the UNESCO offices in Harare (Zimbabwe), Dakar (Senegal), Bangkok (Thailand) and Santiago (Chile) to provide technical assistance and advice on statistical data compilation and analysis. The UIS itself collects and analyze statistical data concerning UNESCO's activity areas such as science, culture and communication, in addition to education.

- 8) These data are retained in the OECD Directorate for Education Statistics Database, accessible from the OECD web site. OECD has been publishing almost annually such statistical data in the report titled *Education at a Glance*, since 1992.
- 9) The participating countries are Argentina, Brazil, Chile, China, Egypt, India, Indonesia, Jamaica, Jordan, Malaysia, Paraguay, Peru, Philippines, Russia, Sri Lanka, Thailand, Tunisia, Uruguay, and Zimbabwe, which together represent over 70% of the world population.
- 10) The results of these surveys are published as reports of international comparison of the education sectors of the 19 countries in terms of system, financing, teacher training, enrollment, etc, and as more specialized reports on investment in education and teachers' social status (UNESCO/OECD 1999, OECD/UNESCO-UIS 2001, UNESCO-UIS/OECD 2003, 2005; UNESCO-UIS 2006, 2007). The Secretariat is operated with financial aid from the World Bank, but other survey expenses for data collection, analysis and the like are entirely borne by the participating countries.
- 11) The outline of the EFA 2000 Assessment was determined in the International Consultative Forum on Education for All, established following the World Conference in Education for All, and the Technical Advisory Group (TAG) comprised of members selected from the Forum's co-organizers (UNESCO, UNICEF, UNDP and the World Bank) designed specific assessment methods and procedures. The 18 EFA Indicators were selected by the TAG. In this international mechanism of assistance, EFA Assessment Groups established in respective countries actually collected data and prepared reports. EFA 2000 Assessment Reports by respective countries are available on UNESCO's web site [http://www.unesco.org/education/efa/efa_2000_assess/] (last viewed by the author on May 10, 2008).
- 12) The indicators used to measure the degree of achievement in each area are EFA Indicators of net enrollment rate in primary education, adult literacy, gender-specific EFA index and survival rate to grade 5.
- 13) For instance, in the United Nations Millennium Summit in September 2000, the International Conference on Financing for Development in March 2002, the World Summit on Sustainable Development from August to September 2002, the High-Level Forum on Harmonization in February 2003, the High-Level Forum on Aid Effectiveness from February to March 2005 and the G8 Summit held annually, there has been a general agreement that the mobilization of resources for assistance to developing countries is an important issue for the international community.

- 14) To be selected as FTI recipients, developing countries must draw up a Poverty Reduction Strategy Paper (PRSP) and a strategic plan of the education sector. Since the preparation of these documents requires great effort, they are considered an appropriate measure of the political commitment of the developing countries to education. Refer to Kitamura (2007) for a detailed discussion of the selection of FTI recipient countries.
- 15) Rose (2005) critically examines the application of the Indicative Framework to review the progress of EFA in FTI recipient countries.
- 16) Reports of assessment of the education sector of FTI recipient countries are available on the EFA-FTI Secretariat's web site [<http://education-fast-track.org/default.asp>] (last viewed by the author on May 20, 2008).
- 17) Data from EFA-FTI Secretariat (2007) and its web site (refer to Note 16).
- 18) For example, a survey by the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) revealed a considerably low level of reading comprehension among Malawian students. Refer to reports available on the SACMEQ's web site for its survey results [<http://www.sacmeq.org/>] (last viewed by the author on May 20, 2008).

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